

**MINUTES**  
**CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC)**  
**MEETING**

**January 31, 2002 in the City of San Bernardino**

The first meeting of the CTCDC in 2002 was held in the Caltrans District 8 building, in San Bernardino, on January 31, 2002.

Chairman Jim Larsen opened the meeting at 9:30 a.m. with the introduction of Committee Members and guests. The Chairman thanked Diana Barrich, Deputy District Director, Traffic Operations for hosting the meeting. The following members, alternates, and guests were in attendance:

<b>ATTENDANCE</b> <b>Members (Voting)</b>	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
Jim Larsen Chairman	CA State Association of Counties County of Tulare	(559) 733-6291
John Fisher Vice Chairman	League of CA Cities City of Los Angeles	(213) 580-1189
Ray Mellen	Auto Club of Southern California	(714) 885-2301
Devinder Singh	Caltrans	(916) 654-4715
Ike Iketani	CHP	(916) 657-7222
Wayne Tanda	League of CA Cities City of San Jose	(408) 277-4945
Dwight Ku	California State Automobile Association, Auto Club	(415) 241-8904
Farhad Mansourian	CA State Association of Counties County of Marin	(415) 499-6570

<b>ALTERNATES</b>	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
Richard Backus	Auto Club of Southern California	(714) 885-2326
Mark Greenwood	League of CA Cities	(760) 776-6450
Jacob Babico	City of Palm Desert CA State Association of Counties San Bernardino County	(909) 387 8186

<b>ATTENDEES</b>	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
Jeremy Vela	City of Palm Desert	(760) 776-6450
Bill Wald	Caltrans HQ-ITS	(916) 651-9048
Jerry Williams	BlinkerStop/TAPCO	(559) 627-1995
Johnny Bhullar	Caltrans/Traffic Ops	(916) 654-7312
Amit Kothari	City of Oakland	(510) 238-3469
Michael Harrison	LightGuard System, INC	(707) 542-4547
Theresa Gabriel	Caltrans HQ-ITS	(916) 654-5653
Matt Schmitz	FHWA	(916) 498-5850
Reh-Lin Chen	City of Berkley 1947 Center St, CA 94704	(510) 981-6403
Lynn Mack	Polara Engineering	(717) 521-0900
Chad Spaltro	Pacific Lighting 23666 Bartcher Dr, #100 Lake Forest, CA 92630	(949) 283-5084
Conrad Lapinski	City of Palmdale	(209) 295-2558
Jess R. Munoz	LA County, DPW	(626) 300-4702
Jack Fleck	City of San Francisco	(415) 554-2344
Frank Markowitz	City of San Francisco	(415) 252-4696
David Royer	University of CC-ITS	(661) 255-6556
Neil Jorgenson	County of Imperial	(760) 482-4462

## MINUTES

Adoption of September 27, 2001 CTCDC meeting minutes.

**Motion:** Moved by Farhad Mansourian, seconded by John Fisher, to adopt the minutes of the Sacramento meeting, held on September 29, 2001, with the following amendment.

AMENDMENT: On page 17, revise the names from, "Farhad Mansourian and Wayne Tanda stated" to "Farhad Mansourian stated."

Motion carried 8-0.

## MEMBERSHIP

Chairman Jim Larsen reminded the Committee that during the September 2001 CTCDC meeting, Ray Mellen announced his retirement from the CTCDC and the Automobile Club of Southern California. However, Ray and the Auto Club reached an agreement which would delay the retirement for an unspecified period of time and the Auto Club requested that Mr. Mellen continue representing the Club as a voting member on the Committee. Gerry Meis and Merry Banks, voting members, did not attend the meeting due to other priorities. Their alternates Devinder Singh and Dwight Ku acted in their place as voting members.

## PUBLIC COMMENTS:

Chairman Jim Larsen asked for public comments on any item, which was not on the agenda. Jacob Babico, Alternate Committee Member, expressed that recently the Traffic Division of San Bernardino County had a discussion with the law enforcement agency on the establishment of speed zones. Jacob explained that the CHP only considers the radar speed survey to establish a speed zone, while the Traffic Manual considers other factors such as geometric features included in the radar speed survey. Jacob asked the Committee for comments. Jim Larsen suggested placing the issue on the next CTCDC meeting agenda and requested Jacob to e-mail his concern to the Secretary of the Committee.

## AGENDA ITEMS (PUBLIC HEARING)

### 00-4 USE OF RAISED PAVEMENT MARKERS IN A TRANSVERSE PATTERN

Chairman Jim Larsen stated that the use of raised pavement markers (RPMs) in a transverse pattern is a continuous item from the last meeting. He also noted that during the September 2001 meeting, Caltrans promised to address the issues raised by Committee Members Farhad Mansourian and Wayne Tanda. Farhad advised the Committee members during the last meeting that in Marin County some cities have used retroreflective RPMs at the right edgelines, and that based on their experience, they work very well in foggy conditions and where there is an embankment or steep drop-off next to the traveled way. In addition, during that meeting Wayne pointed out that the proposed text as presented could be used to delineate cross walks with RPMs, in lieu of the paint or thermoplastic strips. (Continued)

The Chairman asked Devinder to provide an update on the use of RPMs in a transverse pattern. Devinder pointed out the revised verbiage that was included in the agenda packet. Devinder stated that the following verbiage is proposed to be added as a new third paragraph under the current Section 6-01.3 Materials of the Traffic Manual:

*Raised pavement markers may be used to supplement transverse or longitudinal pavement markings, except retroreflective raised pavement markers should not be used for right edgelines. The use of retroreflective raised pavement markers on the right edgeline may lead the motorist to believe there is another lane to the right of the markers. Raised pavement markers should not be used for right edgelines unless other available options have been considered, such as raised and inverted profile thermoplastic stripe, ground-in or rolled-in rumble strip. If either retroreflective or non-reflective raised markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use.*

Devinder stated that the proposed verbiage would not be interpreted to delineate crosswalks with RPMs in lieu of the paint or thermoplastic. The verbiage clearly says: "RPMs may be used to supplement transverse markings." The second issue raised by Farhad was also addressed in the last sentence: "If either retroreflective or non-reflective raised markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use." The revised draft has addressed both issues raised during the September meeting.

The Chairman opened the public hearing. Mike Harrison pointed out that the use of RPMs in transverse pattern is not a good idea because of the visibility under different weather conditions. Mike noted that their product, in-roadway warning lights, is more effective to use in a transverse pattern.

Matt Schmitz, FHWA, inquired that the proposed draft does not address the use of RPMs in a rumble strip pattern. Devinder responded that the use of rumble strips is addressed separately in the Traffic Manual, Chapter 6. The Chairman asked for other comments from the public, and there were none. The Chairman closed the public hearing and opened the discussion for the Committee members.

There was a brief discussion by the Committee members on the revised verbiage. Farhad noted that it might be appropriate to include the verbiage related to the right edgeline under the "Right Edgeline" Section of the Traffic Manual. There was also discussion regarding where to position the RPMs in a transverse pattern at marked crosswalks. Devinder mentioned that the MUTCD 2000, under the Section for In-Roadway Warning Lights (IRWLs), says that IRWLs shall be installed in the area between the outside edge of the crosswalk line and 3-m (10-foot) from the edge of the crosswalk. Mike Harrison, LightGuard, informed the Committee that a 10-foot distance was arbitrarily picked by the National Committee on Uniform Traffic Control Devices.

John Fisher suggested that as long as it is clearly defined that RPMs are not to be placed on the crosswalk line, it should be left up to the agencies to make the determination on how far in advance they should be placed. Wayne Tanda suggested making the verbiage clearer on the use of RPMs in a transverse pattern. (Continued)

Wayne recommends including: *"RPMs shall not be placed either on or within the marked crosswalks."*

Farhad Mansourian offered two motions, one to be added under the Section Materials, and to be read as follows:

*"Raised pavement markers may be used to supplement transverse or longitudinal pavement markings. If either retroreflective or non-reflective raised markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use."*

Farhad further added that the remaining verbiage from the proposed revised draft should be included under Section "Right Edgeline."

Wayne Tanda noted that if the motion proposed by Farhad includes the verbiage, *"RPMs shall not be placed either on or within the marked crosswalks"* after the first sentence, then he would support the motion. Farhad agreed with Wayne's suggestion.

**Motion:** Moved by Farhad Mansourian seconded by Ray Mellen, as follows:

*"Raised pavement markers may be used to supplement transverse or longitudinal pavement markings. RPMs shall not be placed either on or within the marked crosswalks. If either retroreflective or non-reflective raised markers are used on a right edgeline, an engineering study should be conducted documenting the reasons for their use."*

Existing paragraph two of the Section 6-01.3 materials would be modified as follows:

~~For State highways, appropriate pavement delineation patterns shall be selected from those alternate details showing either painted traffic lines with raised reflective pavement markers or raised pavement markers to simulate painted lines. See Figures 6-1 through 6-12.~~

The Chairman asked for discussion on the motion. John Fisher suggested that if the two alternatives as indicated in the revised draft are planned to be included under Section "Right Edgeline", then the striping figures should be revised to include a typical layout of the alternatives.

Wayne suggested since the remaining verbiage is proposed to be included under Section, "Right Edgeline", and the Committee does not have a current section in possession, it should be a new agenda item for the Committee's review and discussion. Committee members agreed with Wayne.

Motion passed 8-0.

**Action:** The item "Use of RPMs in a Transverse Pattern" was completed. A new item to be placed on agenda "Right Edgeline" and Caltrans to bring a draft for the Committee's review and discussion.

## 01-5 ACCESSIBLE PEDESTRIAN SIGNALS

Chairman Jim Larsen noted that the Accessible Pedestrian Signals (APSs) agenda item is a continuation from the last meeting. He also apprised the Committee members and the audience regarding the documents received related to this item. Resolution 2001B-5 received from the California Council of the Blind (CCB), Resolution 99-11 passed by the National Federation of the Blind (NFB). He further informed the Committee that the CCB has communicated with him and indicated that they will not be able to attend this meeting. Therefore, they requested that the Committee defer a final decision until the next meeting. He stated that the item would be continued for hearing during the next meeting. He then opened the public hearing.

Ray Chen, City of Berkeley, stated that he is here today to ask the Committee's approval on "Pedestrian Countdown Signal Heads" (PCSHs) at 16 intersections in the City of Berkeley. He shared with Committee members that the city has been challenged on the proposal to install PCSHs by the Commission on Americans with Disabilities Act (ADA). The Commission on ADA has told the city that PCSHs could not be tested without ADA compliance. He asked if the Committee could provide guidance on this issue. Chairman Larsen noted that since his request to install PCSHs is an agenda item, it would be appropriate to discuss your question during that time.

Mike Harrison, LightGuard, stated that his company is working with the City of San Francisco to install accessible devices for the visually impaired pedestrians with the IRWLs at crosswalks. The device they have developed automatically detects pedestrian presence and alerts the motorist without the knowledge of the pedestrian.

Theresa Gabriel, Caltrans, ITS Branch, commented that she prefers that the requirement to install these devices should be based on the need. The MUTCD 2000 and current Traffic Manual guidelines are in harmony on the installation of these devices. Theresa further stated that if the APS is integrated to all intersections automatically at new signal installations or during modifications, we might be ignoring the safety of the pedestrian and/or drivers. Theresa raised the following concerns:

- A survey needs to be completed to assess the actual needs of APS and/or Audible Pedestrian Signal.
- Ignoring other facts/factors related to the intersections geometrical restriction
- Ignoring factors related to authorized/restricted pedestrian movements for certain approaches at the intersection.
- Ignoring the ambient noise level at the intersection and other types of surroundings (trucks, birds mimicking the device sounds, industrial area, rural area, urban area, surrounding business, neighboring hospitals, fire house, buses, etc.).
- Ignoring the special needs for the surrounding residents at the intersection (elder residents, school, presence (or lack) of citizens needs with any other types of mobility. restriction/impairment.
- Ignoring the engineering decision/judgment for the appropriate intersection design.

(Continued)

Theresa further added that the Manual on Uniform Traffic Control Devices (MUTCD) is currently in harmony with the Traffic Manual for guidelines needed prior to the installation of similar devices (i.e., it should be installed as needed). It has been proven successful in the past for installation of the Audible Pedestrian provision upon request. Caltrans did not deny any request in the past to install the device at needed intersections. All the above factors do not include the financial burden on the districts to include the device for all intersections (installed or modified), and the related maintenance cost to maintain such devices.

Chairman Larsen asked for other comments from the audience, and there were none. The Chairman continued the public hearing until the next meeting and opened the item for the Committee's discussion.

Wayne Tanda asked if Caltrans could identify the fundamental differences on APSs among the MUTCD 2000, State Traffic Manual and the suggested language submitted by the CCB under Resolution 2001B-5 before the next CTCDC meeting. Devinder responded that he would make an effort to summarize the main differences.

Ray Mellen suggested that a brief summary would be helpful to see the differences between the MUTCD 2000, the State Traffic Manual and the position of CCB. Ray further suggested including the comments made by individuals on APSs during the June 2001 meeting in San Diego.

John Fisher noted that the primary fundamental differences between CCB and the MUTCD 2000 on APSs are as follows:

- The CCB recommended that all accessible pedestrian signals must have an auditory tone to announce the walk interval, where in the MUTCD 2000 it is optional.
- The CCB recommended that whenever the State or a local agency installs new or upgrades to the existing traffic signals, the signal system shall be equipped with APSs, where in the MUTCD 2000 it is based on the need.
- The CCB recommended that the desirability of the APSs at specific existing locations, the professional to be consulted in this matter shall be an orientation and mobility instructor certified by the Academy of Certification of Vision Rehabilitation and Education Professionals (ACVREP), not the agency staff. In the MUTCD 2000, it is a joint effort by the agency staff and by the requestor.

The Committee also discussed briefly the statement made by one of the speakers during the September 2001 meeting. The speaker indicated that the Committee could not authorize experimentation without fulfilling ADA requirements (without accessible devices used for the visually impaired pedestrians). Committee members suggested having a legal opinion on this matter. John Fisher suggested that the Committee first should identify the questions to be addressed. He noted that the Committee should ask for clarification on the following questions:

- Does the Division of the State Architect have jurisdiction within public right-of-ways (highways)?

(Continued)

- Does the Division of the State Architect have jurisdiction over traffic control devices?

John added that if the answers to the two above questions are yes, then the follow-up questions should inquire specifically what requirements apply to the visually impaired on the streets and highways. Are there alternatives that could be used to satisfy the needs of the handicapped or blind/visually-impaired individuals?

Chairman Larsen asked Devinder to share the response with Committee members on the letter written to the California Building Standard Commission (CBSC) by the Division of the State Architect, asking for determination on traffic control devices. He also stated that if the response from the CBSC required further discussion by the Committee, he would invite three or four Committee members with their council to meet with Caltrans' council to discuss this matter. The Committee members agreed to have a legal opinion on the statement made by the speaker during the September meeting.

Action: Item to be continued.

## 02-1 PEDESTRIAN SIGNALS

Chairman Jim Larsen introduced the item Pedestrian Signals and asked Devinder to address the proposed amendment. Devinder briefed the Committee that the current verbiage under Section 9-03.2 in Chapter 9 of the Traffic Manual says, "*Signal design must provide for or prohibit pedestrian movements.*" This means, when an agency proposes to install traffic signals at a intersection, they must either provide pedestrian signals or green clearance time, or a sign to prohibit pedestrian crossing, and there are no other options. The proposed verbiage "*Where pedestrian movements regularly occur or are anticipated within 5 years of signal installation, signal* Signal design must provide for or prohibit pedestrian movements" will allow the designer not to provide pedestrian signal faces or a sign to prohibit pedestrian crossings if there is no pedestrian activity and none is anticipated for the next five years. Devinder invited Theresa Gabriel to further address this item.

Theresa Gabriel stated that the current practice to include pedestrian provisions at signalized intersections is based on two factors. One, the actual pedestrian traffic counts, and second, on-site survey observing pedestrian movement or the anticipation of future pedestrians. If there is no pedestrian activity, then based on the current policy, the designer must install a sign to prohibit pedestrians from crossings, and it should be maintained all the times. The loss, misplacement or vandalism of the sign could create liability problems. Another major drawback is wastage of the resources in the essence that the system is not being used. Last but not least, the proposed amendment is only applicable wherever there is no pedestrian activity at present and in the future. There would be a few locations, which would benefit from the proposed amendment.

The Chairman opened the public hearing. Matt Schmitz supported the amendment and suggested that the existing word "must" be replaced with word "shall". Because "must" is a "shall" condition, and to be consistent "shall" is more appropriate to use. (Continued)

Chairman Larsen asked for other comments from the public, and there were none. The Chairman closed the public hearing and opened the item for the Committee's discussion.

Farhad Mansourian moved the motion, seconded by Ray Mellen, to adopt the proposed amendment.

Wayne Tanda noted that there may be a condition in rural areas when the proposed verbiage would be applicable, but it would not be applicable in urban conditions. Wayne pointed out that the proposal required engineers to research the land use of surrounding areas to determine if there would be future pedestrian traffic. It requires major efforts in predicting future pedestrian traffic. They must research the land use of surrounding areas, and this would be at the discretion of the engineers.

Ray Mellen noted that engineers should be able to determine the location for future pedestrian activity. John Fisher pointed out that even the existing verbiage is not clear when it says, "signal must provide for", the agency could interpret this as "to provide pedestrian clearing time or pedestrian signal heads."

Theresa Gabriel stressed the proposed verbiage will be applicable only at remote locations and a majority of the locations would have either signal heads or a sign, and vice versa. The proposal would help to eliminate the wastage of the resources at unwarranted locations.

Wayne said he could not support the amendment since it puts a burden on engineers to predict future pedestrian traffic, which is not a simple task. He further stated that it is the responsibility of the agencies, that they must do one or the other, and maintains those devices. Farhad Mansourian asked Theresa whether the proposed amendment would eliminate the installation of pedestrian signal heads, clearance time or the sign at certain locations. If so, then he is not in the position to support it.

John Fisher noted that he would support the proposal, if it was clearer by changing the words "provide for" to "provide pedestrian signal heads" or "sign to prohibit pedestrian crossing." Chairman Larsen stated that in his opinion the existing verbiage is enough to guide engineers to provide pedestrian clearance time or pedestrian signal heads or sign to prohibit pedestrian crossings.

**Motion:** Moved by Farhad Mansourian, seconded by Ray Mellen, to adopt the amendment to Section 9-03.2 as submitted by Caltrans. Motion failed 7 no votes, 1 aye votes.

**Action:** The Committee stated that the item is completed unless Caltrans wants to bring it back with the revised verbiage.

## **AGENDA ITEMS (REQUEST FOR EXPERIMENTATION)**

### **00-6 PEDESTRIAN COUNTDOWN SIGNAL HEADS (EXPANSION OF THE APPROVED EXPERIMENT UNDER ITEM 00-6)**

**Note:** This item was listed as Agenda Item 02-2 on the January 31, 2002 meeting. Committee Member Wayne Tanda suggested that since this is a request to expand the existing experiment, Item 02-2 should be listed under the previous approved item, which is 00-06.

Chairman Jim Larsen introduced the item and asked Committee Member Dwight Ku to address the request. Dwight Ku introduced Frank Markowitz and Jack Fleck from the City of San Francisco.

Frank Markowitz gave a brief preliminary overview of the evaluation report for the ongoing experiment with the pedestrian countdown signal heads (PCSHs) in the City of San Francisco. This experimentation was approved under Item 00-6. Out of 14 approved locations, 11 of them are under operation with the PCSHs. The California State Automobile Association played an important role in financing and educating the public about the countdown signals. The device is getting very popular from the perspective of the pedestrian. Pedestrians finishing the crossing on red dropped from 14% to 9% at eight intersections. The proportion running or aborting their crossing dropped from 13% to 8%. There was a small change observed in pedestrian/vehicular conflicts, dropping from 6% to 4% of pedestrians. The city interviewed people and found very strong support and an overall positive rating. Only 5% of negative comments came from people who do not want to see any changes.

Frank noted that the city wants to expand experimentation due to the following reasons:

- Overall positive results from the ongoing experiment.
- The city has received a State grant to convert existing signal heads with LED signal heads. It would be economically beneficial for the city to install PCSHs simultaneously at warranted locations.
- The State and Committee would be able to see a more extensive evaluation, larger sample, which will reduce the argument of novelty factor of the device.
- The city will provide reasonable maintenance and crash history impact assessment.

Frank further noted that the city would include a pedestrian behavioral, attitudinal and maintenance evaluation on the initial eight intersections. The study will also include pre and post pedestrian collision data. Frank asked the Committee members for questions.

Chairman Larsen asked about FHWA's involvement. Frank responded that the city has received approval for ongoing experimentation from FHWA. The city also has applied to the FHWA for an expansion.

(Continued)

Farhad Mansourian observed that the proposed PCSHs does not provide a device for visually impaired individuals.

Frank responded that this is correct.

Farhad further stated that a member from the City of San Francisco representing the Mayor's Office stated that the Committee could not authorize experimentation without accommodating ADA requirements.

Jack responded that the Department of Parking and Traffic had a discussion with the Mayor's Office, and there is an understanding that this experiment would proceed upon the Committee's approval. At the same time, the city has received a grant to install audible devices at 40 to 50 intersections. There is a need for more studies prior to the city installing audible devices on a massive scale. The city is treating these two issues separately.

John Fisher stated that he has two comments. First, the issue that was brought before this Committee by an ADA representative was: "if an agency provides a visual display for the sighted pedestrians (countdown clearance), then the agency must provide devices for visually impaired pedestrians." John further elaborated that accessible pedestrian devices tell the pedestrian when to walk, they do not tell them when to clear. John noted that the city's proposal to expand experimentation appears to be an indication that the device ultimately will be approved as a standard traffic control device and that may be a best guess at this time. John inquired if the countdown device, external to the controller, can ever be out of sync when cycle lengths and splits vary throughout the day.

Jack responded that a countdown device is directly tied to the "Flashing Red Hand" (FRH) and FRH is tied in with the controller operation. It should not make any difference.

Dwight Ku asked if the city has collected any data on the part of vehicular driver behavior change or increase in citations at the 11 intersections with PCSHs.

Frank responded that their observation at experimental locations did not find any significant change.

Ray Mellen asked how many intersections would be equipped with the PCSHs under this expansion program and what would be the time frame?

Frank responded that citywide, 40% to 50% of signals have pedestrian signals, which would be replaced with the PCSHs. The city is targeting 30 to 50 intersections in the first three-month period; the number could go up to 100 intersections.

John Fisher asked if the city has collected data on pedestrians who understand the meaning of FRH. John further added that the education on FRH might be helpful to cities where PCSHs would not be installed.

(Continued)

Jack responded that there was a study done in the past on FRH, and the majority of pedestrians responded that FRH means go back. Jack further added that with the PCSHs, pedestrians know how much time is left to cross the street.

John asked if it is possible to include pedestrian data in the study, those who understand the meaning of FRH.

Frank responded that preliminary interviews at the ongoing experimental locations indicated that the majority of pedestrians are aware of the meaning of FRH.

Chairman Larsen asked for other comments from the Committee members and the audience. There were none.

**Motion:** Moved by Dwight Ku, seconded by Wayne Tanda, to authorize the City of San Francisco to expand the experimentation on PCSHs citywide.

The Chairman asked for a discussion on the motion. Devinder suggested that the Committee should place a condition that the authorization for expanding the experimentation citywide is subject to FHWA approval. Devinder added that to authorize the experimentation as citywide indicates that the device will become standard, as it is approved for experimentation.

Wayne Tanda stated that he sees merit in the proposal. It will provide a larger sample and he applauds the city for taking the liability risk for installing PCSHs to collect more data. John Fisher stated that in his opinion the PCSHs would be eventually approved as a standard traffic control device.

Ray Mellen asked that during the September 2001 CTCDC meeting, a gentleman from the City of San Francisco Mayors Office had stated that the Committee could not approve experimentation without ADA compliance.

Jack responded that all he can say on this issue is that the Parking and Traffic Department's Attorney have told them that the proposal is in compliance with ADA requirements. He further stated that different Attorneys might interpret the ADA law differently. Jack noted that the city has a different grant to test audible signals.

Ray Mellen further asked, is it possible that the City of San Francisco has litigation within their different departments?

Jack responded that he is comfortable working with the Mayor's Office on this proposal.

**Motion** passed 7 aye votes, 0 no votes and 1 abstention. Devinder Singh abstained

**Action:** Item completed

**02-2 PEDESTRIAN COUNTDOWN SIGNAL HEADS** (For clarification, this item was listed 02-3 on the January 31, 2002 meeting)

Chairman Jim Larsen introduced the PCSHs experimentation request by the City of Berkeley and asked Wayne Tanda, sponsor, to apprise the Committee. Wayne stated that although the Committee has just approved citywide experimentation for San Francisco, he would invite Reh-Lin Chen from the City of Berkeley to give a brief presentation to the Committee about the city's proposal on PCSHs.

Reh-Lin Chen apprised the Committee that the Office of Traffic Safety, State of California, has identified the City of Berkeley as number one in pedestrian/bicycle collisions in comparison to cities of the same size and same population within the State of California. During 1996-97, the City of Berkeley identified 22 intersections having a maximum number of collisions related to pedestrians/bicyclists. The city is committed to improving pedestrian safety. The city has learned that the PCSHs installed by different agencies are showing success to improve pedestrian safety. Therefore, the City of Berkeley is requesting an experimentation approval to install PCSHs at 16 intersections. Reh further requested that six locations would be picked for a comprehensive study, which will include video monitoring, pre/post accident data and other parameters that have been suggested by this Committee in the past to other agencies. The city will receive assistance from UC Berkeley in the data collection process. Reh further informed the Committee that the Commission on ADA has challenged him on the PCSHs installation. The ADA advocates informed him that the city could not install PCSHs without fulfilling the ADA requirements. Reh also requested input from the Committee on ADA requirements.

Chairman Larsen advised Reh that he should consult with the city Attorney on this matter. He also pointed out to Reh about the discussion that was held during the previous item between the Committee members and the representatives from the City of San Francisco, on a similar matter.

Wayne asked Reh, you mentioned in your presentation that only six locations would be selected for a qualitative comprehensive study out of the 16 locations proposed for experimentation. Wayne suggested that the city should at least collect some data at other locations too. Reh responded that the city would collect some partial data, such as telephone calls and e-mails from the public on those locations.

Chairman Larsen asked for other comments from the Committee members and audience. There were none.

**Motion:** Moved by Wayne Tanda, seconded by Farhad Mansourian, to authorize experimentation with PCSHs at 16 intersections as submitted by the City of Berkeley.

The Chairman asked for discussion on the motion. Devinder Singh pointed out to Reh that there are five proposed locations on State highways, and then asked if Reh had a conversation with Caltrans District-4 Office in regards to those locations. Devinder then pointed out that the city of San Francisco has included a statement in their experiment proposal, "The City would be responsible for liability on State highways for injuries and damage" (Continued)

directly related to the countdown signals. The State would appreciate, if the City of Berkeley would assume similar responsibilities.”

Reh responded that he is in touch with Caltrans District 4 Office and he will work with them to reach an agreement.

Ray Mellen asked Reh if he has identified six locations for a comprehensive study. He further asked if a scramble intersection would be included in the study and if any of the proposed locations has a city's flag system in place.

Reh responded that the six intersections would be the worst intersections from the 16 locations, and a scrambled intersection is one of the locations for the comprehensive study. The intersection of Shattuck and University Avenue is proposed to use flags but has not been implemented yet.

The Chairman asked for a vote on the motion. Motion passed 8-0.

Action: Item Completed.

## **INFORMATION ITEMS**

### **99-11 MUTCD ADOPTION BY CALTRANS**

Johnny Bhullar, Caltrans, gave a brief overview to the Committee and audience on the progress of the MUTCD adoption with the California Supplement. The format of the California Supplement will be similar to the MUTCD and it will be in dual units. Johnny referred to the handout given to Committee members and noted that he will be giving three parts of the MUTCD to the Committee members and Caltrans Internal Committee in early April of 2002 for review and comments. These three parts are, Part 2 Signs, Part 4 Highway Traffic Signals and Part 6 Temporary Traffic Control. The second set proposed to be handed out in July of 2002. After receiving comments from CTCDC members and from Caltrans, the comments will be incorporated and a draft will be posed on the Caltrans website for comments. Two months later, there will be a “workshop” to resolve any outstanding conflicts. The focus is to complete this process and provide enough time for the Caltrans Legal Office to adopt the MUTCD with the California Supplement on or before the federal deadline of January 17, 2003.

Chairman Larsen noted that the Committee would be able to decide when and where to meet after receiving the first submittal to review. Wayne Tanda and Ray Mellen commented that the “Workshop” might require the Committee to meet more than one day.

Johnny also briefly talked about the FHWA's Standard Highway Sign Manual. Presently, in California a similar publication is called Traffic Sign Specifications, published by Caltrans. The adoption of the Standard Highway Sign Manual would be similar to the MUTCD process. In California, the Traffic Sign Specifications publication will include only those signs that are not included in FHWA's Standard Highway Signs Manual. (Continued)

The Chairman asked for comments from the audience.

Jacob Babico stated that he sees there would be a financial impact on local agencies with the adoption of the MUTCD in California. Jacob cited a few examples, such as the Chevron Alignment (W81-Traffic manual, W1-8-MUTCD) sign, School Advance Warning (W63-TM, S1-1-MUTCD) sign and School Crossing (W66-TM, S2-1-MUTCD) sign. At the national level, the Chevron Alignment sign policy requires that a minimum of two Chevron signs should be visible to the motorists all the time, while in California it is three. Jacob also talked about the new stopping distance, passing sight distance criteria adopted by AASHTO.

Johnny responded that the policy and practice of placing a traffic control device would not be changed in California with the adoption of the MUTCD, and wherever California differs with MUTCD, that will be covered in the California Supplement.

In summary, members noticed that it would take significant time and effort to go through the review process before there will be a final product.

#### **01-11 PORTABLE OR TEMPORARY SPEED DISPLAY SIGN**

Chairman Larsen noted that Caltrans promised to research their records, CTCDC files and the MUTCD, to see if there is any existing information on this item. He asked Devinder to update the Committee. Devinder stated that he has discovered some information on the Changeable Message Sign (CMS) and Portable Changeable Message Sign (PCMS), and that the information was e-mailed to members. Devinder further stated that Caltrans started using the CMS and PCMS in the 1980's. Caltrans has published the guidelines and specifications, for both CMSs and PCMSs. The CMS is also covered in the MUTCD 2000, under Sections 2A.07, 2E.21 and 7B.11. PCMS is covered in the MUTCD under Section 6F.52.

Wayne Tanda pointed out that the information the Committee was looking for was in regards to Speed Display (speed feedback) signs, not CMS and PCMS. There was a brief discussion between Committee members, either to bring this item back for further discussion or leave it the way it was decided during the September 2001 CTCDC meeting. Wayne Tanda strongly suggested that it is not a traffic control device and his jurisdiction has been used in school zones to calm traffic. He is planning to share that success with other agencies. John Fisher noted that if the Committee did not give any guidance, there might be a number of different vendors, providing different types of formats for the sign. Wayne responded that there are already different types of formats, maybe different colors too. Wayne further stated that the speed feedback sign in his opinion are not a traffic control device.

Mark Greenwood stated that during the last meeting the motion failed. Ray Mellen and Wayne Tanda suggested placing this item, again, on the agenda to make a decision whether it is a traffic control device or not. John Fisher and Jim Larsen also supported placing it on the agenda.

(Continued)

Further, John requested that Caltrans provide a statement as to whether it believes the speed feedback sign is a traffic control device and if it seeks the Committee's guidance on standardization. The item on the agenda would be: "If the Speed Feedback Sign is A Traffic Control Device or Not."

Action: Item to be placed on agenda for the next CTCDC meeting.

#### **NEXT MEETING**

The next CTCDC meeting will be on May 2, 2002. The meeting will be hold in Northern California.

**ADJOURNMENT:** The meeting was adjourned at 2:30 PM.